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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,005	09/16/2003	Youngun Pae	7124.020	6644

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EXAMINER

MOORE, MARGARET G

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/667,005	Applicant(s) PAE, YOUNGUN	
	Examiner Margaret G. Moore	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 to 33 and 67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 to 33 and 67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 2 to 33 and 67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2 and 33, the tint additive formula is somewhat confusing. Note, for instance, that in the propylene bond connecting NH and Si, the angles in the line represent CH₂ atoms; that is, the absence of any specific group is taken to indicate the presence of a hydrogen atom. Thus, in the bond attached to the left hand side of the NH group, the absence of any other indicated bond or group would lead one to believe that a hydrogen atom is present. In such a situation it is unclear where or how the R₁ or R₂ group is attached to the polyoxyethylene group. The Examiner suggests that the silane containing formula be amended to clarify that the carbon atom in the N(H)C=O group is attached to the polyoxyethylene group.

In claim 2, reference to "the composition" on, for instance, the second to the last line on page 3 of the claims submitted 9/14/04 (the fourth line in base compound (1)) is confusing. Line 1 of claim 2 refers to a composition while base compound (1) refers to a composition. As such it is unclear to which composition this refers. This applies in base compounds (2) to (5) as well.

It is unclear in claim 33 if reference to the hydrolysis products and partial condensates of an epoxy functional silane, a tetrafunctional silane and a multifunctional compound, found starting on the line 6 of the claim embraces the specific base compounds (1) to (6) or if these products are in addition to base compounds (1) to (6). The Examiner raises this question because each of the components found in the claim starting on line 6 are embraced in more specific amounts in compounds (1) to (6).

Claim 67 is incomplete.

2. The instant claims are neither taught nor suggested by the prior art. The inventive aspect of this coating composition is the combination of the tint additive with the specific base compounds. The base compounds are generally known. Applicants have supplied copies of references teaching them in their Information Disclosure Statement. See for instance Terry et al., 6,538,092. The tint additive compound is also

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known, albeit teachings of this compound are scarce. For instance Jacobine et al., issued in June of 2004, has a claim directed to such a compound when both R_1 and R_2 are silane groups. See claim 14. Harisiades et al. generally include such compounds as well. For instance see the formula (A) and note the definition of T on the bottom of column 2, wherein the top of column 5 teaches polyethylene glycol T groups. Thus the only difference between the compound on column 11, line 12, and the claimed tint additive is the propylene diol reactant rather than the polyethylene glycol reactant, the difference of which would have been obvious in view of the total teachings in Harisiades et al. Katz et al. teach silanes compounds on column 7, lines 45 to 50, in which X can be a polyether (column 6, line 10). Finally, Chang et al. teach silane compounds that are similar to the tint additive but differs in that the R^{14} on column 3 in Chang et al. is not hydrogen.

There simply is no teaching, motivation or suggestion to include a compound meeting the required formula for the tint additive into a base compound composition as claimed. In view of this the instant claims are neither taught nor suggested by the prior art.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
3/26/05